CHAPTER 1

INTRODUCTION

1.1 THE PURPOSE OF THE EIR

In January 1998, PG&E filed an application (Application No. 98-01-008) to divest (sell) four of its fossil-fueled power plants (Contra Costa, Pittsburg, Hunters Point, and Potrero) and its Geysers geothermal plant. On July 17, 1998, PG&E amended its application, withdrawing the Hunters Point plant from the proposed sale. The divestiture of the Contra Costa, Pittsburg, Potrero, and Geysers plants is now the project proposed by PG&E and analyzed in this Draft EIR.

The CPUC, the Lead Agency, has prepared this Draft EIR to provide the public, and responsible agencies reviewing this project, with information about the potential effects on the local and regional environment. This EIR was prepared in compliance with the California Environmental Quality Act (CEQA) and the state CEQA Guidelines.

The EIR describes the environmental impacts of the transfer of ownership of four of PG&E's power plants. Mitigation measures are suggested for reducing or eliminating any identified significant environmental impacts. The impact analyses in this report are based on a variety of sources, including agency consultation, public scoping, detailed information provided by PG&E on each of the power plants for sale, experience from power plant divestiture projects completed by PG&E and Southern California Edison (Edison) in 1997, and field surveys.

1.2 PROJECT OVERVIEW

1.2.1 BACKGROUND

Electric energy is generated using a turbine and a generator, which together comprise a generating unit. A generating facility or power plant normally consists of several generating units. In California, approximately 550 generating power plants (250 thermal plants and 300 hydroelectric plants) are owned by public and private electric utilities. An additional 900 smaller plants are owned and operated by non-utility generators.

Electric power systems consist of three components: generating plants, transmission lines, and local distribution systems. Generating facilities may consist of one or more units that can be operated separately to make electricity. The transmission system is a network of lines providing multiple paths from electricity suppliers or generators to distribution substations. Transmission lines feed electricity from generating units into distribution substations located near demand areas. Transformers located at the substations reduce or step-down the high voltage transmitted

over the transmission lines to a lower voltage for local distribution. Distribution lines connect the substations to the consumer (see Figure 1.1).

Consumers in California have historically purchased the majority of their electricity from one of the state's largest investor-owned utilities (IOUs): Pacific Gas and Electric Company (PG&E), San Diego Gas and Electric Company (SDG&E), or Southern California Edison Company (Edison). These utilities are state-regulated entities that historically provided a "bundled" service at specified rates. A bundled service refers to all stages of electricity transmission including: electricity generation at power plants; routing power to broad regions via transmission lines; distributing power to consumers over local wires or distribution lines; and administrative activities associated with providing electric services.

California's current electricity rates are about 50 percent higher than the national average. In the past, the California Public Utilities Commission (CPUC) set electric utility rates for generation, transmission, and distribution. These rates were based on a cost-of-service regulatory framework plus a reasonable profit margin for the IOUs. Regulated utilities had to seek approval from the CPUC prior to making any changes to rates or services.

In order to make California's electric industry more competitive, improve consumer choices, and lower utility rates, California's legislature and the CPUC have taken a series of steps to restructure and reform the industry. These reforms, their evolution, and their likely consequences for consumers are summarized in two attachments to this report: Attachment A "How Electric Industry Change Will Affect You," and Attachment B "Regulatory Background." As an end result, consumers of electricity will be able to purchase electricity either from their current utility or from any other electricity supplier. The legally mandated changes in the electric industry in California are generally and collectively referred to as "restructuring."

1.2.2 RELATED DIVESTITURE PROJECTS

To further competition, the CPUC has requested that the two largest IOUs, PG&E and Edison, voluntarily divest ownership of at least 50 percent of their generating capacity. The CPUC believes that this reform, by increasing the number of electrical suppliers, will foster competition in the electric industry.

In November 1996, PG&E filed an application (Application No. 96-11-020) to respond to the CPUC's request for voluntary divestiture, requesting authority to sell four of its eight fossilfueled power plants: Hunters Point, Morro Bay, Moss Landing, and Oakland. In late June 1997, PG&E amended the application to withdraw the Hunters Point Power Plant from the sale. In accordance with the California Environmental Quality Act (CEQA), the CPUC prepared a Mitigated Negative Declaration for the amended divestiture application. The sale of the three plants to affiliates of Duke Energy Power Services, Inc. was approved by the CPUC on December 16, 1997. The sale closed on July 1, 1998.

Edison also filed an application with the CPUC (Application No. 96-11-046) in November 1996 to sell 12 fossil-fueled power generating stations in southern California (all of its in-state fossil-

California's Electric Utility Service Areas (1996)

Area is serviced by both Suprise Valley and Pacific Corp Area is serviced by both Suprise Valley only Pacific Corp **GENERATION** Shasta Lake LMUD - Area is serviced by both PSREC & LMUD PG&E Sierra Pacific Power **TRANSMISSION** - Truckee-Donner PUD Healdsburg Kirkwood **SUB-STATION DISTRIBUTION** SCE Note: This figure shows the service areas of California's three Investor Banning Owned Utilities: PG&E, Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E). San Diego Gas and Electric (SDG&E). In addition, this figure shows LADWP (Los Angeles Dept. of Water), LMUD (Lassen Municipal Utility District), MEID (Merced Irrigation District), PSREC (Plumas-Sierra Rural Electric Cooperative), MID (Modesto Irrigation District), SMUD (Sacramento Municipal Utility District) TID (Turlock Irrigation District). Escondido -SDG&E **CUSTOMER**

- Divestiture of Electric Generation Assets / 980125
Figure 1 1

Electric Power System Model

Figure 1.1 Structure of Utility Industry

fueled power generating stations except for Pebbly Beach located on Catalina Island). The CPUC also prepared a Mitigated Negative Declaration for that application. In November 1997, Edison announced the sale of ten of these plants. In February and March 1998, Edison announced the sale of the remaining two plants. The purchasers of the plants include AES Corporation, Houston Industries Power Generation, Inc., Thermo Ecotek Corporation, and NRG Energy, Inc. and Destec Energy, Inc. (NRG/Destec). These sales have closed.

On November 25, 1997, San Diego Gas & Electric Company (SDG&E), the state's third largest IOU, announced its intention to auction its California fossil-fueled power plants, its 20 percent interest in the San Onofre Nuclear Generating Station, and its interest in a number of long-term power supply contracts. SDG&E filed an application with the CPUC (Application No. 97-12-039) on December 19, 1997 for this proposed sale. The CPUC is currently reviewing the potential impacts of this application, in accordance with CEQA.

1.2.3 DIVESTITURE OF PG&E GENERATION ASSETS

In January 1998, PG&E filed a new application (Application No. 98-01-008) to sell four of its five remaining fossil-fueled power plants (Contra Costa, Pittsburg, Potrero, and Hunters Point, but not Humboldt) and its Geysers geothermal plant. On July 17, 1998, PG&E amended the application to withdraw the Hunters Point plant from the sale, pursuant to a July 9, 1998 agreement between PG&E and the City and County of San Francisco. Under the terms of the agreement, PG&E agreed to withdraw the Hunters Point Power Plant from the auction process by which it proposes to sell the other four plants, and agreed permanently to shut down the Hunters Point plant as soon as the facility is no longer needed to sustain electric reliability in San Francisco and the surrounding area, and the Federal Energy Regulatory Commission (FERC) has authorized PG&E to terminate PG&E's Reliability Must Run Contract for the facility. The agreement provides that the City and PG&E will advocate the expeditious development of generation and/or transmission facilities to replace the Hunters Point plant. PG&E agreed to record a restrictive covenant on the Hunters Point plant site ensuring that it will not be used for power generation in the future, and to give the City a right of first refusal to purchase the site if it is sold by PG&E. The City and County of San Francisco agreed not to directly or indirectly seek to acquire the Hunters Point or Potrero Power Plants during the pendency of PG&E's sale of the Potrero plant, nor to take any action to cause any condition to be imposed on the sale or operation of the Potrero plant or to otherwise interfere with its sale. The new owner of the Potrero plant will be required to meet and confer with the Mayor of the City to evaluate impacts of any development or expansion plans for the Potrero plant. Although signed by the Mayor and by PG&E, the agreement is subject to approval by the City's Public Utilities Commission and the Board of Supervisors (the City Public Utilities Commission approved the agreement on July 14, 1998). The agreement is conditioned upon the CPUC approving PG&E's application to fully recover its sunk costs in the Hunters Point plant through the Competitive Transition Charge (CTC).¹

This EIR does not prejudge how the CPUC will act on PG&E's request to recover such sunk costs through the CTC, nor what PG&E would do with the Hunters Point plant if the CPUC were to deny PG&E's CTC request and the agreement between PG&E and the City failed to take effect. As CEQA contemplates, the EIR analyzes the proposed project in the form currently proposed by PG&E, and makes reasonable assumptions consistent with that proposal.

The sale of the three remaining fossil-fueled plants and the Geysers plant and the resultant environmental impacts are the subject of this Environmental Impact Report (EIR). Approval of the specific divestiture plans by the CPUC is required by Public Utilities Code Section 851 prior to the sale of the plants. Under the terms of the proposed divestiture, PG&E will transfer (or the buyers will seek reissuance of) all environmental permits, leases, contracts, and other land use agreements associated with each plant.

1.3 KEY AREAS OF ENVIRONMENTAL CONCERN

This EIR will analyze all potential environmental impacts of the proposed divestiture; in other words, no topical areas have been scoped out of the document through an initial study. At the same time, however, PG&E's Proponent's Environmental Assessments (PEAs) and the public and agency scoping process for the EIR have identified certain key areas of concern upon which this EIR should focus and analyze in detail. These are discussed below.

As part of the application process, PG&E prepared two PEAs, one that considered the environmental impacts resulting from the sale of the four fossil-fueled plants originally proposed for divestiture and a separate one considering the impacts related to the Geysers Power Plant sale. The PEA for the fossil-fueled plants identified three sets of environmental regulations and permit conditions that cause special concerns in light of the potential for sales of the plants to multiple owners. These three areas of concern and PG&E's proposal for mitigating items (2) and (3) are:

- (1) Bay Area Air Quality Management District (BAAQMD) Regulation 9, Rule 11: This regulation will need to be modified. As written, Regulation 9, Rule 11 only applies to utility-owned boilers; the rule allows PG&E to elect between meeting specific nitrogen oxides (NOx) emission targets for each boiler or meeting specific systemwide emission rates that decline over time, measured as a weighted average of the emission rates from its Bay Area boilers collectively at the Contra Costa, Hunters Point, Pittsburg, and Potrero plants (the "bubble option"). In anticipation of the changes brought about by restructuring and divestiture, BAAQMD has expressed its intention to modify Regulation 9, Rule 11 to ensure its continued applicability to all of the electric utility steam boilers at the four Bay Area power plants.
- Oispatch Requirements for Pittsburg and Contra Costa Plants: In accordance with the Waste Discharge Requirement Orders (or National Pollution Discharge Elimination System permits) issued by the Regional Water Quality Control Boards with jurisdiction over the Pittsburg and Contra Costa plants, PG&E is required to use the Best Technology Available (BTA) for the location, design, construction, and capacity of cooling water intake structures to minimize environmental impacts on fish and other biological resources. The conditions in each permit require PG&E, at certain times, to follow a specific protocol for dispatching the units at both plants, even when that protocol results in units being operated out of economic merit order. In general, the protocols require PG&E to preferentially load Pittsburg Unit 7, which, in contrast to other Pittsburg and Contra Costa Units, uses closed-cycle rather than once-through cooling. Other units at the two plants must also be sequentially loaded in a manner designed to minimize the thermal impacts of the combined operations.

PG&E believes there is no cost-effective alternative to this coordinated dispatch that can be implemented in a manner consistent with a timely divestiture. Mechanical alternatives,

such as fish screens or modifications to the cooling water cycles at the plants, have not been demonstrated to be technically feasible, would be time consuming to evaluate and costly to build, and could only be implemented with approval of both the San Francisco Bay and Central Valley Regional Water Quality Control Boards. PG&E believes it is also infeasible for competing owners to accomplish the coordinated dispatch required by the permits through contractual agreements or other forms of cooperation. PG&E has therefore concluded that the best way to ensure equivalent protection for the environment while preserving the market value of the plants is to require the Pittsburg and Contra Costa Power Plants to be sold to a single owner. The alternatives section of this EIR will evaluate the impacts to the environment that would result if the Pittsburg and Contra Costa plants were sold separately.

The Habitat Conservation Plan: The ongoing operation of the Pittsburg and Contra Costa Power Plants requires the intake of large quantities of circulating water for condenser cooling. The operation of these plants also requires routine repair and maintenance activities. These operation and maintenance activities have the potential to cause "incidental take" of endangered and threatened species, which is prohibited under the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA), unless valid incidental take authorization is obtained. PG&E has developed a Habitat Conservation Plan (HCP) in which it has agreed to specific operational controls that, under most operating scenarios, should have the effect of reducing cooling water flow at each of the two plants. PG&E plans to transfer the Pittsburg and Contra Costa plants to a single owner in order to facilitate both plants' compliance with the conditions of the incidental take authorization. In addition, to facilitate both plants' compliance with federal and state requirements for incidental takes, PG&E plans to convey to the new owner sufficient title or beneficial interest in the Montezuma Enhancement Site to allow the property to continue to serve as mitigation for both power plants. This EIR will consider the effects on endangered and threatened species of the proposed divestiture. In addition, the alternatives section of this EIR will evaluate the impacts to the environment that would result if the Pittsburg and Contra Costa plants were sold separately.

Areas of concern identified during public meetings and the agency scoping process with respect to the fossil-fueled plants include:

- (1) Health effects of potential increased operations resulting from divestiture, especially in the neighborhood of the Hunters Point Power Plant, which PG&E has withdrawn from the proposed sale.
- (2) Alternatives to the continued reliance on the Hunters Point and Potrero Power Plants to supply power within the City and County of San Francisco.
- (3) Effect of the sale on PG&E's boat-washing activities connected to the Contra Costa and Pittsburg Power Plants.

A considerable number of scoping comments pertained specifically to the Hunters Point Power Plant, which has been withdrawn from the proposed sale. To the extent that such comments were also deemed applicable to the remaining power plants proposed for sale, they have been factored into the analyses in this EIR.

At the Geysers Power Plant, key areas of environmental concern include air emissions and hazardous wastes resulting primarily from naturally occurring constituents of geothermal steam.

Areas of concern identified during public meetings and the agency scoping process with respect to the Geysers Power Plant include:

- (1) The potential for "steam stacking" in the Geysers Geothermal Area. Any reductions in the operation of units at the Geysers Power Plant resulting from divestiture could result in steam releases through unabated steam vents. Of particular concern is the potential to increase hydrogen sulfide emissions. Public officials and residents are similarly concerned that if power generated at the Geysers plant is not economically competitive in the restructured electricity marketplace, the new owner or owners may shut down some units, leading to steam stacking and the release of unabated air emissions.
- (2) The effect of the sales on microseismicity in the Geysers area.
- (3) The potential for legal disputes between PG&E and the new owner over clean-up responsibility to delay timely remediation of contaminated areas, and adversely affect onsite workers and off-site receptors.
- (4) The potential for the sales to increase diversions from creeks in the Geysers area.
- (5) The potential for the sales to result in a loss of current tax revenues collected from the Geysers Power Plant. There is also concern over the recovery of costs for valuation of the property and any subsequent litigation over those values and tax burdens.

See Chapter 3, Approach to Environmental Analysis, for a discussion of the methodology used to address the issue of whether the proposed divestiture will result in environmental impacts.

1.4 ORGANIZATION OF THE EIR

The EIR for the proposed sale of the four power plants consists of the Draft EIR, which contains the environmental analysis of the proposed project, and the Final EIR, which will contain comments received during the public review period and the responses to those comments. This Draft EIR has been organized into the following sections:

Executive Summary: Summarizes the changes as a result of the proposed project, the environmental impacts that would result from implementation of the project, the mitigation measures suggested to reduce or eliminate any identified impacts, and alternatives to the project.

Chapter 1, Introduction: Provides an introduction and overview that describes the proposed project and the purpose of the EIR, summarizes the EIR review and certification process, and identifies the environmental issues.

Chapter 2, Project Description: Discusses the project objectives; provides background data on the terms of the proposed sales, the individual power plants, and the power generation process; and describes changes projected to occur with implementation of the proposed project.

Chapter 3, Approach to Environmental Analysis: Describes the potential changes resulting from divestiture (including the types of changes that could produce environmental impacts), identifies analytical and computer modeling assumptions, and sets forth computer

modeling results that provide information about the possible operational changes that could occur with divestiture.

Chapter 4, Environmental Setting, Impacts and Mitigation: Describes the existing conditions, evaluates the environmental impacts of the project, and identifies mitigation measures for the impacts identified in this EIR.

Chapter 5, Cumulative Impacts: Evaluates cumulative impacts that could be associated with implementation of the project, together with reasonably anticipated future projects producing related or cumulative impacts.

Chapter 6, Alternatives Analysis: Presents the alternatives to the project and provides a discussion of the environmental impacts associated with each alternative in comparison to the project.

Chapter 7, Report Preparation: Lists report preparers, identifies public agencies that were consulted, and describes public involvement in the EIR process.

Chapter 8, Glossary and Acronyms: Defines terms and acronyms used in this EIR, particularly those associated with the electricity generation, transmission, and distribution processes and their regulation.

Attachments: Includes the Notice of Preparation (NOP) for this EIR and background technical material.

1.5 EIR PROCESS

1.5.1 NOTICE OF PREPARATION

In accordance with CEQA Guidelines §15082, the CPUC prepared an NOP for this EIR (see Attachment D), which was mailed on February 27, 1998 to local, state, and federal agencies and to the State Clearinghouse for a 30-day review period. The NOP provided a general description of the proposed project, including a review of the power plants proposed to be divested, and a summary of the main regulations and permit conditions that cause special concerns in light of the potential for sales of the plants to multiple owners. Responses from these agencies helped to determine relevant environmental issues associated with the project that are addressed and analyzed in the EIR.

1.5.2 PUBLIC AGENCY PARTICIPATION PROGRAM

In order to gather information related to the possible environmental effects of this divestiture application, the CPUC initiated a concerted program to consult other affected agencies and jurisdictions. The CPUC's Public Agency Outreach Program was developed for the purpose of establishing early contact and opening lines of communication with key public agencies directly affected by the divestiture plan proposed by PG&E in Application No. 98-01-008, and to obtain insight and information for this EIR.

The Agency Outreach Program included consultations with over 35 public agencies conducted at central meeting locations, agency offices, and by telephone. Local agency representatives provided historic background on plant operations, permitting requirements, changing regulatory requirements, land use information, community perceptions, and local environmental concerns. Chapter 7 of this EIR presents a schedule of meetings held as part of the Agency Outreach Program and lists all letters received from agencies in response to the NOP.

1.5.3 PUBLIC SCOPING

The CPUC conducted four public scoping meetings to explain the environmental review process and to receive public comment on the scope of the EIR. These meetings were conducted in multiple locations convenient to residents who live near the power plants proposed for divestiture. The CPUC sent a notice of the public meetings to more than 700 potentially interested parties, including residents and homeowners within a one-quarter-mile radius of the project areas, special interest groups, and local, regional, and state governmental office holders and agencies. Advertisements announcing the public meetings were placed in multiple papers throughout the geographic area of the project. Chapter 7 of this EIR provides a more detailed description of the CPUC's public involvement efforts.

1.5.4 DRAFT EIR

This document constitutes the Draft EIR. It contains a description of the project, description of the environmental setting, identification of project and cumulative impacts and mitigation measures for impacts found to be significant, as well as an analysis of project alternatives.

1.5.5 FINAL EIR CERTIFICATION

Written and oral comments received in response to the Draft EIR will be addressed in a Response to Comments document that, together with the Draft EIR, will constitute the Final EIR. The Final EIR will be released for public review. The CPUC will then consider EIR certification. Upon EIR certification, the CPUC may proceed with project-approval actions.

If the CPUC approves the project even though significant impacts identified by the EIR cannot be mitigated, the agency must state in writing the reasons for its actions in a Statement of Overriding Considerations.

1.5.6 MITIGATION MONITORING AND REPORTING

CEQA requires lead agencies to "adopt a reporting and mitigation monitoring program for the changes to the project which it has adopted or made a condition of project approval in order to mitigate or avoid significant effects on the environment." The specific reporting and monitoring program is not required to be included in the EIR. Throughout the EIR, however, mitigation measures have been clearly identified and presented in language that will facilitate establishment

of a monitoring program. Any measures adopted by the CPUC as conditions for approval of the project will be included in a Mitigation Monitoring and Reporting Program to verify compliance.